

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 20606

EXPIRATION DATE: 2018-12-31

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Spaceflight, Inc. Seattle, WA

2. PURPOSE AND LIMITATION:

- a. This emergency special permit authorizes the transportation in commerce of low production lithium ion battery modules contained in equipment (MISC-3 CubeSat satellite) that is not of a type proven to meet the criteria in Part III, sub-section 38.3 of the UN Manual of Tests and Criteria and that is not packaged in a UN-specification packaging. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
- c. No party status will be granted to this special permit.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(e) (1) and (2) in that the packaging is not a UN-specification packaging, except as specified herein.

5. <u>BASIS</u>: This special permit is based on the application of Pumpkin Space Systems submitted on behalf of Spaceflight, Inc. dated January 17, 2018 in accordance with § 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Lithium ion batteries, contained in equipment	9	UN3481	N/A

7. <u>SAFETY CONTROL MEASURES</u>:

a. OPERATIONAL CONTROLS-

- (1) Only one low production battery module contained in equipment and comprised of not more than eight cells identified in Pumpkin Space Systems' application for special permit dated January 17, 2018 and on file with the Office of Hazardous Materials Safety Approvals and Permits Division (OHMSAPD) may be offered for transportation under the terms of this special permit.
- (2) The battery module must be protected against short-circuiting.

b. TESTING -

- (1) The batteries contained in equipment must be composed of cells of a type that has passed all required tests as specified in the "UN Manual of Tests and Criteria, $5^{\rm th}$ Revised Edition."
- (2) The MISC-3 CubeSat battery module must be of a type proven to have passed T.1 through T.8 except for T.6 and T.8 tests as described in the application submitted on January 17, 2018 on file with OHMSAPD.

c. PACKAGING -

- (1) The battery module contained in equipment (i.e., the MISC-3 satellite) must be encased in an aluminum box dispenser and then wrapped in a plastic electrostatic dissipative (ESD) bag;
- (3) The ESD bag containing the battery module within the satellite must be placed in an Explore Case (Model Number 7641 B) as specified in Pumpkin Systems' application package dated January 17, 2018; and
- (4) The net weight of the battery module in a package may not exceed 12 kg.
- 8. <u>Marking Requirements</u>: Each package, and overpack if used, prepared under the provisions of this special permit must be plainly marked with the number: DOT-SP 20606.

9. SPECIAL PROVISIONS:

- a. Under the terms of this special permit, the grantee may only offer hazardous materials (i.e., the grantee is not authorized as a carrier).
- b. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package and it is reoffered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- 10. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.
- 11. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.

- 12. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by $$107.601 \text{ } \underline{\text{et seq.}}, \text{ when applicable.}$

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

13. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 Immediate notice of certain hazardous materials incidents, and 171.16 Detailed hazardous materials incident reports. In addition, the grantee(s) of this

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special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp app/special permits/spec perm index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H